

Title	Retrofit aluminium window joinery		
Level	4	Credits	2

Purpose	<p>A person credited with this standard can:</p> <ul style="list-style-type: none"> • demonstrate knowledge of compliance requirements for retrofitting aluminium window joinery; • prepare to retrofit aluminium window joinery; • retrofit aluminium window joinery; and • complete cleaning and storage requirements.
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Classification	Construction Trades > Glazing
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Available grade	Achieved
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Guidance Information

1 Assessment

This unit standard must be assessed under the supervision of a commercially competent glazing practitioner in workplace conditions that reflect:

- current health, safety, industry, and workplace requirements; and
- industry requirements for commercially acceptable timeframes.

Evidence generated for assessment against this standard must be verified by a person who has current expertise in the glazing trades and has had the opportunity to regularly observe the candidate in the workplace.

- #### 2 Installation must be completed without injury to personnel or damage to products and equipment. Personal protective equipment must be used to meet regulatory and worksite requirements.

3 Definitions

Personal protective equipment includes – anything used or worn by a person (including clothing) to minimise risks to the person's health and safety.

Worksite requirements refer to instructions to staff on policy and procedures which are documented in manual format and are available in the workplace. These requirements include – company specifications and procedures, work instructions, manufacturer's specifications, product quality specifications, legislative requirements.

- #### 4 Evidence generated for assessment against this standard must reflect the best practice guidelines and principles specified in:

- AS/NZS 1170.0:2002. *Structural design actions – Part 0: General principles*;
- AS/NZS 4666:2012. *Insulating glass units*;
- NZS 3504:1979. *Specification for aluminium windows*;
- NZS 3604:2011. *Timber-framed Buildings*;

- NZS 4211:2008. *Specification for performance of windows*;
- SNS TS 4211:2022. *Classification for the performance of windows*
- NZS 4223.3:2016. *Glazing in buildings – Part 3: Human impact safety requirements*.

AS/NZS and NZS standards are available at <http://www.standards.govt.nz>.

5 Reference

New Zealand. Ministry of Business, Innovation & Employment – Hīkina Whakatutuki. (2019). *Verification Methods E2/VM1 and Acceptable Solutions E2/AS1, E2/AS2 and E2/AS3: For New Zealand Building Code Clause E2 External Moisture*. Available at: <https://www.building.govt.nz/building-code-compliance/e-moisture/e2-external-moisture>.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of compliance requirements for retrofitting aluminium window joinery.

Performance criteria

- 1.1 Explain the compliance requirements for retrofitting an aluminium window frame.
- Range external moisture, hazardous building materials, safety from falling, construction and demolition hazards, energy efficiency.
- 1.2 Explain issues that relate to the quality and performance of retrofitted aluminium window joinery.
- Range ability to accept the new insulated glass unit (IGU), compatibility of frame and components, structural integrity of the existing frame, weather tightness and drainage, friction stays; compatibility of frame and components – glazing tapes, gaskets, sealants, fastenings.
- 1.3 Describe the remedial actions for issues relating to the quality and performance of retrofitted aluminium window joinery.

Outcome 2

Prepare to retrofit aluminium window joinery.

Performance criteria

- 2.1 Confirm the design requirements and job specifications with the customer before work begins.
- Range design details, dimensions, drawings, product information, site operational procedures.

- 2.2 Select glazing materials and sealants reflects to meet the job specifications.
- 2.3 Check and gather equipment, tools, and installation materials before work begins.
- 2.4 Undertake a site check for the installation.
- Range measurements, site floor levels and allowance for floor finishes, suitability and location of fixing provisions, surrounds are plumb and/or level, installation hazards or problems.
- 2.5 Plan the installation.
- Range cost, time, working drawings, engineering requirements, availability of materials, safety considerations.
- 2.6 Check the window frame.
- Range obstruction free, clean, dry, primed and/or sealed, compatible with glazing material and glazing system, weight loading.

Outcome 3

Retrofit aluminium window joinery.

Performance criteria

- 3.1 Confirm the glass meets the design requirements and job specifications.
- 3.2 Confirm the frame and beads meet the job specifications.
- 3.3 Retrofit aluminium window joinery to meet the job specification.
- Range remove existing glass, prepare rebates, fit glass, fix glass reassemble the frame.
- 3.4 Provide information to the customer about any relevant maintenance and warranty requirements.

Outcome 4

Complete cleaning and storage requirements.

Performance criteria

- 4.1 Clean and store tools and plant used to retrofit aluminium window joinery.
- Range plant may include – any machinery, vehicle, equipment (including personal protective equipment), used in a glazing operation.
- 4.2 Clean the retrofitted aluminium joinery and clear and clean the work area.

Planned review date	31 December 2027
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	24 November 2022	N/A

Consent and Moderation Requirements (CMR) reference	0048
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Waihanga Ara Rau Construction and Infrastructure Workforce Development Council at qualifications@waihangaararau.nz if you wish to suggest changes to the content of this unit standard.